Energy and NYC

Juicing Up the Green Apple!

Dreamt up during the Blackout of 2003, this map was created to promote energy awareness and action in New York. Tired of paying more all the time? Sick of having a noisier, grimier community? We are surrounded by healthy energy choices – small changes, better habits and time-saving innovations! Let this Powerful Green Map guide you to New York City's wealth of sustainable* options.

The Unfolding Story of this Map

Open this map in sections to view three maps:

- **Dark Side** – Why We Need to Act Now
- **Bright Side** – Every Day & Easy Green Choices
- **Powerful Investments** – For Today & Tomorrow

Glossary

***Sustainability –** a balance of environmental integrity, social equity and economic vitality.

Climate Change – Global Warming: undeniably impacted by humanity's choices, weather is getting erratic and stormier, with dire predictions ahead.

Emissions – airborne discharges of pollution, CO2 or water vapor, etc. into the atmosphere.

Renewable Energy – powered by the sun: solar, wind, biomass (plants) and other infinite resources.

@ = At this website address (may need **www.**) Click to learn more, download resources, etc.

☎ = Call this telephone number for details

About this Map

Green Maps are locally made maps of the natural and cultural environment that use Green Map® Icons to indicate sites and promote sustainability. This is the 22sth published worldwide, as seen at @ GreenMap.org! NYC's is the original Green Map, and this energy edition is our fifth citywide Green Apple Map.

GM - **Get Maps** at Greenmarkets, gardens, libraries, green businesses and at other sites on this map. Send in a stamped, self-addressed envelope for one copy or call/email for many. This map is also available as a poster, or tape 2 together for your wall.

There's more energy online: @ GreenAppleMap.org has in-depth information, ♪ links and tips in Chinese, Spanish and English. See NYC youth maps, too.

GREEN MAP

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Energy Dark Sides: True Costs & Predictions

You Have the Power!

What's your dream for the future - the Baked Apple or a healthy, beautiful city?

By exposing current and predicted energy-related problems on this map, our aim is to create awareness and positive action for our common future.

Even though NYC is known as the USA's most energy efficient city, we are paying a very high cost for our current power choices:

- the highest asthma rate in the country
- fossil fuel dependency, resulting in debt, unhealthiness and injustice
- the insecurity of being unprepared for the future
- the changing climate – the impacts of global warming are just dawning on us

Climate Change Predictions

What happens to our city's 580 miles of shoreline if the ocean water levels rise as Columbia Earth Institute's "Climate Change and a Global City" report (Vivien Gornitz, 2001 @ earth.columbia.edu) predicted? Without surge barriers, areas impacted by a 10 foot flood are shown in grey. Accelerated by the emission of carbon dioxide (CO2) and other greenhouse gases from cars, buildings, farms, landfills, etc., ancient glaciers and the North Pole are melting, pouring fresh water into the oceans. New York could lose its storm surge buffers, vital infrastructure (water treatment and subway stations, airports, bridges) and biodiversity at the same time. Your energy-smart actions today can help prevent this prediction from becoming reality.

Is NYC prepared?

Our foolish choices are impacting everything – 2005's weather extremes including Hurricane Katrina, summer's record drought in the Midwest and Europe, Arizona's week-long 110° heat wave, Bombay India's 37 inches of rain in one day, then a two-foot snowfall in NYC in early 2006 – all are indicators we can no longer ignore. Get the booklet *Ready New York* $ 311, get climate change resources @ greenhousenet.org.

"Where's the Non-Smoking Lane?"
– Steve Stollman @ LocalExpression.com

Even though NYC has the lowest number of autos per resident of any major US city, we're driving more – 66,000,000 miles daily!

50% of NYC's air pollution (and 80% of inhaled cancer-causing substances) comes from vehicle emissions, and the increase in heavier, less efficient autos and especially wide SUVs is costly to all. NYC has new pollution laws for garbage trucks, taxis, construction equipment, and buses. Studies show auto emissions will be reduced through congestion pricing (midtown tolls – see @ RPA.org). Nationally, 20% of CO2 comes from autos. With 5% of global population, the USA contributes 25% of the CO2 (now at a 650,000 year high level!). 2005 was the hottest year on record.

Terror and trauma – over 40,000 Americans are killed each year by cars, trucks and buses. In NYC, there are over 650 accidents every day. The 25 most dangerous intersections for pedestrians and cyclists are on the map. See @ crashstat.org. Still gotta drive? Slow down! Drive with a light foot and see highlights at @ greenercars.com. Don't drive yourself to extinction.

Smokestacks from fossil fueled electrical power plants dot our waterfront. NYC's air quality is No.3 worst in the US, according to Environmental Defense, and over 185,000 of our kids already have asthma. See @ ed.org, $ 212-505-2100. Check air quality @ epa.gov/airnow and toxic emissions at @ scorecard.org.

Peak Oil is the point at which oil extraction declines worldwide. Some experts say we're peaking now. North America's natural gas is in decline, too. Costs are soaring! Are we adapting to using less fossil fuel? See @ oilawareness.meetup.com/36/, @ PeakOilNYC.org or @ EnergyBulletin.net.

There have been no major oil spills in NYC since 1990, but current diesel pollution hot spots are on the map, along with Newtown Creek's infamous fifty-year old 17 million gallon spill – see @ GreenpointExxon.com. Find out more about toxic infrastructure and other justice issues through Natural Resources Defense Council @ nrdc.org, Sustainable South Bronx @ ssbx.org and West Harlem Environmental Action @ weact.org.

Ecological Restoration sites cultivate natural wetlands and plants to clean up oil spills and landfill leaks, as seen on Gaia Institute's @ gaia-inst.org.

Security Concerns: Nature creates hazards, but it's our careless development that fuels disaster.

Nuclear power plants are controversial – true, they create no CO_2, but their radioactive waste is an unsolved safety risk for current and future generations. NYC's closest power plant, Indian Point, is a major security risk, too. Cities, counties and Congress members want it closed – learn more at @ riverkeeper.org

There is no national security without environmental security. Contact policy makers via Who Represents Me @ NYPIRG.org. See corporate campaigns at @ ran.org & faith-based action at @ ClimateCrisisCoalition.org.

"Government support for energy conservation and renewables is a very sensible priority."
– Ben Cohen, president @ TrueMajority.org

BICYCLING AGAINST OIL WARS

Sign: Committee for Full Enjoyment

Every Day and Easy!

Empowered Mobility

The *power to change* is in our hands, thanks to abundant free, low-cost and readily available options for our daily needs, all across NYC! Multiple benefits: a healthier hometown, cleaner air, more $ saved and a more physically fit you. Start here today – then move on to Side 2's energy investments.

Getting Around

Walking is one of the greatest adventures in the Green Apple, and powerfully efficient, too. Explore diverse cityscapes on 6,000 miles of sidewalks. We recommend walking the dog every day, even if you don't have a pet. NYC Parks offer great walking and refreshment anytime.

Take a free guided urban adventure walk with @ nycParks.org, @ WalkNY.org, $ 212-228-3126 or @ shorewalkers.org. Get inspired by @ mysonglines.com and NY Soundmap at @ nyAcousticEcology.org. What can your block association, club or school do to improve conditions? Kids and community resources include the Walking School Bus $ 646-375-2306 and @ ActiveLivingResources.org. See @ TrafficRelief.org, @ BikeWalk.org and @ RightOfWay.org, too.

.... 75 miles of car-free Greenways offer beautiful biking, walking, running and skate paths. NYC's network grows each year (see @ treebranch.com) as does the East Coast Greenway @ greenway.org.

Connect with 108 miles of .... Bike Paths and 25 accessible bridges, including those over Jamaica Bay, East River and Harlem River, the Tri-Borough, George Washington and more. All are detailed on NYC's great Bike Map at @ nyc.gov/dot $ 311. It includes bikes-on-transit rules, safety tips and far more than we can detail on this small but Powerful Map!

Fast, convenient, healthy and cheap: 120,000 ride bicycles in NYC every day, enjoying the many advantages of this powerful vehicle for social change! Dress visibly – lights, bell and good brakes are required, plus a helmet for those 14 and under. Bikes usally win cross-borough car-subway-bike races.

Advocacy, planning, great rides & events with Time's Up! @ times-up.org $ 212-802-8222 and Transportation Alternatives @ transalt.org $ 212-629-8080. Ride the state with New York Bicycle Coalition @ nybc.net, and help calm NYC's streets at monthly @ Critical-Mass.org rides – see **16** on Side 2. See @ BikeCult.com and @ NewMobility.org.

Some garages offer secure bike parking, your workplace may, too. There are 3,169 City Bike racks installed – get one from @ nyc.gov/dot $ 311. Sad-looking "beater bikes" deter theft, good locks are a necessity.

Pedicabs are delightful bike-powered taxis. Catch one on the street or call Manhattan Rickshaw for a ride $ 212-604-4729.

NYC now has its first hybrid fuel taxis and luxe car service @ OZOcar.com $ 866-OZO-5966.

Map Concept: 8/2003 – gasoline $1.89/gallon 12/2005 – $2.49/gallon; natural gas & oil up ~30%

Major Mass Transit Connections. Practically weather-proof, subways transport 4.6 million riders daily, buses carry 2.4 million. There's a 20% discount with a $10 Metro Card. Subway and bus @ mta.info $ 718-330-1234 or check @ hopstop.com for mixed walking/transit directions. Advocacy: @ Strap-hangers.org campaigns for system improvements and @ vision42.org for light rail. World Carfree Day is September 22 – when will New Yorkers take part?

NYC has over 40% of the entire country's mass transit – have an adventure on Metro North (One Day Getaways), on ferries, the Airlink, or take America's only commuter cable car, the Roosevelt Island Tram. Take your bike along and explore distant beaches and parks. @ nyc.gov/dot has ferry schedules, private bus routes and live traffic cameras. Low CO2 travel by train @ Amtrak.com $ 800-USA-RAIL or by bus @ peterpan-bus.com $ 800-237-8747 or @ trips123.com.

Car sharing saves hassle, $$$, congestion and resources. When you need one, ZipCar's efficient, partly-hybrid fleet is conveniently parked in 19 spots @ zipcar.com $ 866-4-ZIPCAR. Carpooling is another great way to reduce impacts and avoid creeping along in isolation – find one through $ 1-866-NY-COMMUTE or @ carpoolworld.com. Combine your errands to reduce frustration and congestion.

Brighter Lighting – most traffic cross-walk and signals now use super efficient LED lighting. Soon to be everywhere, spot LEDs in exit signs, bike lights today. Find solar panels on new parking meters, emergency phones and road-work signs.

Air & Water Transport

Ferries and Water Taxis are delightful, especially the free Staten Island Ferry with fresh green terminals at both ends. See our great harbor and the Statue of Liberty. Low-emission ferries are on our wishlist. Schedules at @ nyc.gov/dot – put "Ferries" in the quick search.

Water-borne Recreation - rowboats, kayaks, canoes - are available at no or low-cost to the public, thanks to boat-building groups @ RockingTheBoat.org $ 718-466-5799, @ FloatingTheApple.org and community groups like Bronx River Alliance @ bronxriver.org – @ DowntownBoathouse.org has links to all. See @ Metropolitan Waterfront Alliance's calendar and campaigns @ waterwire.net $ 800-364-9943.

Sail on the @ Clearwater.org or with @ nycAudubon.org to learn about our waterways' rich wildlife. @ NYHarborSchool.org is a visionary marine-themed NYC public school.

Fastest growing source of CO2: Flying! It's practically the same as each passenger driving alone to the destination. Besides the noise pollution and emissions around airports, high altitude releases of CO2 have double the impacts. You can offset them (substitute with carbon-reducing renewable energy development) at @ NativeEnergy.com or @ BetterWorldClub.com, a travel agency that offers roadside assistance to bicyclers and insurance discounts for hybrid cars. Vacation locally and enjoy NYC's global and natural diversity!

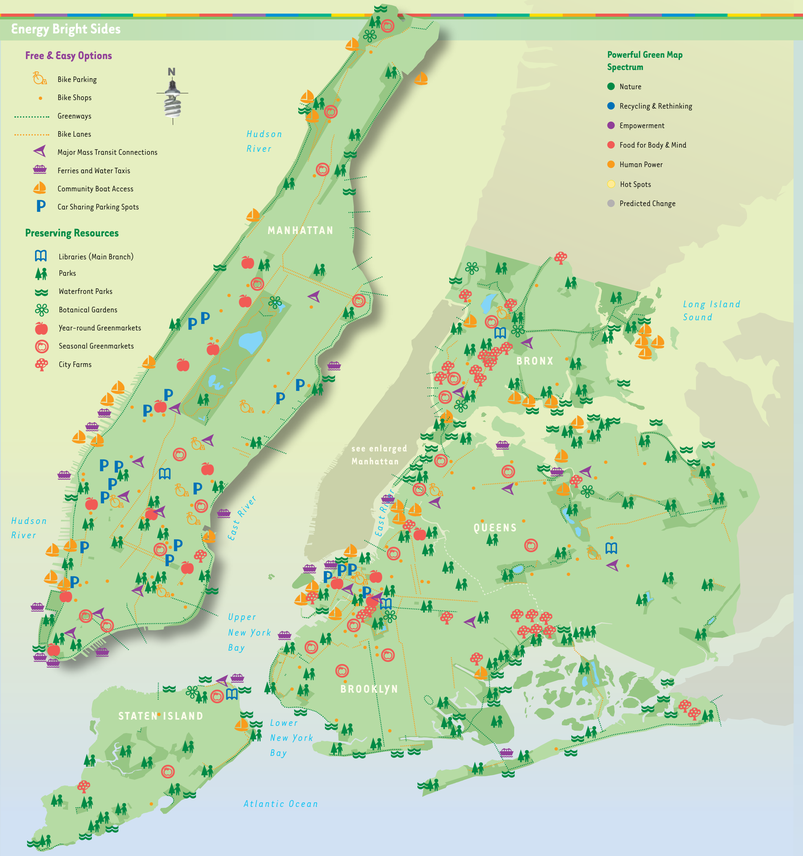
Energy Bright Sides

Free & Easy Options

- Bike Parking
- Bike Shops
- Greenways
- Bike Lanes
- Major Mass Transit Connections
- Ferries and Water Taxis
- Community Boat Access
- Car Sharing Parking Spots

Preserving Resources

- Libraries (Main Branch)
- Parks
- Waterfront Parks
- Botanical Gardens
- Year-round Greenmarkets
- Seasonal Greenmarkets
- City Farms



Powerful Green Map Spectrum

- Nature
- Recycling & Rethinking
- Empowerment
- Food for Body & Mind
- Human Power
- Hot Spots
- Predicted Change

Every Day Savings

Conserving Embodied Energy

Conserving Energy is easy: Turn off lights, computers, TVs, A/Cs when not in use. Wear a sweater indoors in winter so you can turn down the heating. Close curtains on hot summer days. Find tips in English, Chinese and Spanish at @ GreenAppleMap.org. See 19 SolarOne energy education center on Side 2.

Check your progress – is your energy bill shrinking? Want a cleaner electricity source? Click "Power Your Way" at @ ConEd.com, compare at @ PowerScore-Card.org. Get advice from @ IdealBite.com, @ greenhomeNYC.org and NY State's @ GetEnergySmart.org $ 1-866-GRN-POWR. Ready to re-invest? See Side 2!

Waste Reduction and Reuse means don't waste energy buying disposables or tossing good stuff. Julia Butterfly Hill of @ CircleofLife.org says, **"Bring your own mug, take-out containers, and shopping bags."** Make stuff you have last longer – if we bought and tossed less, we'd see, smell and breathe less garbage every day. Too much junk mail? Free list removal @ DMAconsumers.org. Prevent charities from bombarding you – give through @ NetworkforGood.org.

Libraries are a classic energy-saving resource. Each borough's major library is mapped; citywide, there are over 200 branches! Check locations and hours: @ brooklynpubliclibrary.org $ 718-230-2100 ext 4 @ queenslibrary.org $ 718-990-0700 ext 3 New York Public Library: @ nypl.org, which serves The Bronx $ 718-579-4200, Manhattan $ 212-661-0626 and Staten Island $ 718-442-8562.

Second-hand shops are chic, cheap and prevent waste, too. NYC has far too many to chart but find them through $ 1-877-NYC-STUFF, @ nyc.gov/NYCwasteless or @ ReUseAlliance.net. Trade via @ freecycle.org, or set up a free Exchange Shelf in your community center or lunch/laundry room. See 39 on Side 2.

INFORM has WasteFree NYC, a Community Waste Prevention Toolkit, and more online @ informinc.org

Cultural non-profits and art schools can take a wide variety of items donated by companies from Materials for the Arts @ mfta.org $ 718-729-3001.

Recycling really does save resources and energy. Really! Get your neighbors to separate metal, glass, paper, plastic for NYC's deluxe weekly pickup. @ nyc.gov/sanitation $ 311 has details, free posters and schedules. Radio Shack and Staples stores recycle batteries and cellphones, see @ earth911.org.

Composting means recycling kitchen scraps and yard waste into fertile soil. This "black gold" is the most efficient form of recycling. How-to and drop-off info at @ NYCcompost.org or Lower East Side Ecology Center's stand at **16** Union Square Greenmarket every M, W, F and Sat. LESEC also arranges electronic "eWaste" recycling days for computers, etc. around NYC @ LESecologycenter.org $ 212-477-4022. Recycle rain too @ rainbarrelguide.com!

Nature's Way

Ever felt an "urban heat island"? Every summer, our streets and buildings concentrate the heat. Our Parks, Community Gardens and other green spaces provide cooler, cleaner air. Chill out by nurturing a small oasis: water a windowbox or a street tree, see @ TreesNY.com. There's about a half-million street trees in NYC – get one planted $ 311.

Join a community garden and help cultivate a formerly empty lot with @ GreenGuerillas.org $ 212-402-1121 or NY Restoration Project @ nyrp.org. Find on NYC's open space map @ oasisnyc.net – South Bronx, north Brooklyn, Harlem and the Lower East Side are major districts.

Natural refreshment is free every day at NYC parks! With 28,000 acres, we have the nation's largest urban park system. The City is re-planting a diversity of native plants and restoring habitats for butterflies and birds @ NYCparks.org $ 311.

Waterfront park views and breezes air-condition our spirit - see Metropolitan Waterfront Alliance's events and maps @ waterwire.net.

Enjoy and learn at lush Botanical Gardens in the Bronx @ nybg.org, Queens (see **41** on Side 2) @ queensbotanical.org, Staten Island @ silbg.org, Brooklyn @ bbg.org. Find more like The Bronx's @ FriendsofBrookPark.org on map.

Food Matters

27 seasonal and 15 year-round Greenmarkets bring the freshest seasonal tastes to your table. Buy local to keep our region green. Open days vary, get the current schedule at any Greenmarket or @ cenyc.org $ 212-788-7476. The biggest one, Union Square Greenmarket, is **16** on Side 2.

Grow your own food at a City Farm like East New York Farms $ 718-649-7979, or connect with regional organic farmers through a Community Supported Agriculture "subscription" program. 37 CSAs are at @ justfood.org $ 212-645-9880.

Fuel for you: Meat production and imported foods waste lots of energy and vitamins. Alternatively, resource-efficient locally grown and/or pesticide-free organic foods offer vitality – see @ TrueCostofFood.org and @ GraceLinks.org. Fish facts: @ seafood.audubon.org helps you avoid eating endangered fish and @ GotMercury.org helps you avoid endangering yourself.

With new healthy local and/or organic dining, delivery and shopping options opening all the time, we can't chart them all – find 'em online @ happycow.net or @ vivavegie.org $ 212-242-0011. A vegetarian or vegan (totally free of animal products) diet is a great way to save energy.

Mind Food: public radio like WBAI 99.5 FM or WNYC 820 AM/93.9 FM; magazines like *Plenty*, *Organic Style*, *Metropolis* and *E*; community papers like *The Villager* and books galore. See @ grist.org, too.

Bright Lights - Big City

New York's energy is legendary!

Requiring an investment of time or money, the green sites and resources on this half of the map use conservation and efficiency along with renewables and other advanced and decentralized forms of energy. Paybacks include rebates and tax credits, smaller utility bills, healthier neighborhoods and a true sense of security in knowing you are a clean power generator.

Respecting the privacy of residents, please **view sites from the street unless a specific address is provided**. = by appointment only, please. Sites indicated with a single Green Map Icon give you an overview of the great progress being made.

Glossary

@ = At this website address (may need **www.**) 100 + websites are included for your convenience.

☎ = Call this telephone number for details

GM - Get Green Maps here

= **Green Buildings** include efficiency, renewable energy, green materials and/or a green roof or garden. Every building in NYC can be greener.

= **"LEED"** (Leadership in Energy and Environmental Design) Certified Buildings meet the nationally accepted standard for design, construction and operation of high performance green buildings. The key features of these buildings are sustainable site development, water savings, energy efficiency, green materials selection and indoor environmental quality. @ usgbc.org.

= **Green Roofs** use a living carpet of plants to cool the air while insulating the building. There's two kinds: extensive (not meant to be walked on) and intensive (more garden-like). Good for absorbing noise and rainwater, attracting birds and butterflies; fireproof, too. There are also cool roofs, painted to reflect heat. @ GreenRoofs.org and @ CoolRoofs.org. @ GreeningGotham.org has NYC case studies – our flat roofs are ideal!

Renewables and Alternatives generate clean energy locally. This **"distributed generation"** creates thousands of new jobs and reduces our dependence on foreign oil at the same time:

= **Fuel Cells** create hydrogen to generate electricity on the spot, lowering grid demand.

= **Geothermal** systems pump up warmth in winter or cold in summer from deep underground wells, where the temperature is always stable.

= **Co-Generation** produces heat and either electricity or mechanical energy from one fuel, dramatically increasing output.

= **Solar Panels** generate electricity (PV systems) or hot water without emissions. Payback Period is the cost of installation minus the savings on your electric bill. Net Metering means excess PV power can be sold to Con Edison.

= **Bio-based** includes bio-diesel (recycle cooking oil to run your car!), anaerobic digesters (such as the ones that use Fresh Kills landfill's gas), and biomass, which includes plant-based fuels like ethanol.

= **Wind or Marine Power** spins turbines 24/7 to generate clean, quiet and efficient electricity.

Lower Manhattan

At the southwest tip of Manhattan, there's a high-end showcase: stroll around the pesticide-free lawns and look at blue PV panels on the **01 Solaire and Tribeca Green** residential towers. See the moving **02 Irish Hunger Memorial**, native plant gardens and site-specific artworks along the esplanade. Hudson River views recharge your spirit as you walk south. Manhattan's largest solar array – 36 kiloWatts – is atop **03 Museum of Jewish Heritage's** south annex, and the **Verdesian** towers above. @ BatteryParkCity.org explains their complex's advanced green development policies. You're just around the bend from:

04 Staten Island Ferry - Whitehall Terminal

SE corner of Battery Park @ siferry.com
Both the Manhattan and Staten Island terminals are bright new green buildings, with great views of the harbor! Open 24/7. The ferry is a wonderful escape - enjoy a free harbor cruise any time.

05 Statue of Liberty & Ellis Island

Now helping us all breathe free, these National Park sites in New York Harbor are biomass-powered.

If the People will Lead, the Leaders will Follow

06 26 Federal Plaza 290 Broadway and 500 Pearl Street are renewably powered government buildings. NYC Department of Design and Construction has built 16 much-admired projects. Download free manuals for high-performance buildings, geothermal heat pumps, efficient lighting at @ nyc.gov/html/ddc/html/ddegreen/ or buy from **07 CityStore** in the Municipal Building, 1 Centre Street.

Official Good News! The City has signed onto @ SierraClub.org's national Cool Cities CO2 campaign, NY State has a 25% renewable portfolio standard target for 2013, a 9-state climate pact and an important energy research and development authority @ nyserda.org $ 1-866-NYSERDA. NY Power Authority @ nypa.org has replaced 181,000 power-hungry fridges, and more. As seen at @ nyc.gov/sustainability, NYC's Green Apple Initiatives include fuel cells, microturbines and co-generation systems in dozens of buildings, and even a competition. Find out more about CO2 and business incentives for reducing grid demand at @ nyc.gov/edc. City Council is on it too, ensuring that new buildings built by NYC meet LEED standards by 2007. Follow local legislation at @ ClimateRescue.org and @ EANY.org and voice your opinion.

08 Center For Architecture

536 LaGuardia Place @ aiany.org $ 212-683-0023 Rotating exhibits, events and info. Build it Green! NYC now has several great green architecture firms, see @ aia.org/cote, @ usgbc.org or @ oZnyc.org.

Renters and Owners, learn from experts with @ GreenHomeNYC.org. Click Get Started for great advice and overviews of many buildings on this map, then check the calendar's cool events, including tours of and homes that don't often welcome the public.

Power Diversity in the East Village

09 National Audubon Society
700 Broadway $ 212-979-3000 @ audubon.org
Improvements save 60% of energy costs in one of NYC's first green retrofits. Livability-focused Project for Public Spaces @ pps.org is also based here.

10 Fourth St. Food Coop
58 East 4th St. $ 212-674-3623
Working together saves 25% on organic food.

11 East Third Street has 4 new affordable Lower East Side People's Mutual Housing Association developments by Chris Benedict RA, who has 38 more clustered in Brooklyn and Inwood $ 212-477-6016. See @ Greening-Block.org, which aims to transform an entire LES block.

12 ABC Botanical Garden
East Sixth St. btw Avenues B & C @ 6bc.org
PVs catch the sun for the waterfall and shed lights.

13 Recycle A Bicycle
75 Avenue C $ 212-475-1455
Youth empowerment low-cost bike shop.

14 Lower East Side Park
Just east of 1st Ave. btw East 11th & 12th Streets @ OpenRoadNY.org $ 212-460-8447, ext. 168.
Youth designed! PVs, pond and water - swale.

15 Angelica Kitchen
300 East 12th St. $ 212-228-2909
A pioneer, this organic café is now one of dozens in NYC serving healthy locally grown, energy-efficient vegetarian meals. See links in Side 2's "Food Matters".

Heading Uptown in Manhattan

16 Union Square Greenmarket
17th St. & Broadway @ cenyc.org $ 212-788-7476
Biggest in NYC. Union Square Park is a free speech mecca and starting point for Critical Mass rides.

17 Natural Resources Defense Council
40 West 20th St. $ 212-727-2700
Powerful advocates for eco-energy, green buildings and CO2 reduction. Terrific website at @ nrdc.org.

18 ABC Carpet & Home
888 Broadway $ 917-496-4459
Solar consulting on 1, organic linens upstairs. Calculate your new electric bill at @ ABCrealgoodsSolar.com.

19 Solar One
Stuyvesant Cove Park, East River at 23rd St.
@ solar1.org $ 212-505-6050
People Power created this vibrant eco-park, and @ StuyvesantCove.org and Community Environmental Center created this energy, arts and education center.

20 NYC's Children Intake Center
Bright daylighting and quality air.

21 Cloud Institute for Sustainability Education
307 7th Ave. @ sustainabilitylab.org $ 212-645-9930
Teacher training, bio-sculpture & resource @ See @ NEED.org, @ HealthySchools.org & @ EarthDayNY.org.

22 Earth Pledge Foundation
122 E 38th St. @ earthpledge.org $ 212-725-6611
Fashion, food, green roofs & biogas – it's all here!

23 4 Times Square & One Bryant Park (LEED Platinum, under construction)
42nd St. btw 6th and 7th Avenues
Two great green skyscrapers! Both these and 24 are by the high performance Durst Organization, NYC's committed green developers. 1 block west, the NY Times building uses an efficient double "skin" of glass.

24 The Helena
Energy Star apartment building. PV by @ altPOWER.com, NYC's original solar skyscraper designer-installer.

25 United Nations HQ (10%) and Secretary General's residence (100%) are wind powered. See @ unep.org and @ un.org's Millennium Goals. Watch for new urban and global accords on climate change, too.

Cool New Power Sources

Wind & Marine Power holds great promise – entrepreneurs and venture capitalists, take note! Pilot projects for Fresh Kills, Governors Island and East 90th, 75th, 62nd and 34th Street ferry terminals are being planned. @ LongIslandNN.org is developing 40 large turbines to power 44,000 homes! Purchase wind energy for your home or business from @ Community-Energy.biz $ 866-WIND-123. Green Map's office uses their local NewWind Energy – yours can too!

26 Underwater Turbines
East River, east side of Roosevelt Island
Using natural underwater currents to pioneer generation of low-impact electricity. 5-10 megawatts is the eventual goal. @ VerdantPower.com.

27 1400 Fifth Avenue
@ 1400onSth.com
Harlem's first affordable and smart residences.

The Buzz in The Bronx

28 Environmental Construction Outfitters
901 E 134th St. @ EnvironProducts.com $ 800-238-5008
Natural building materials - paints, insulation & more.

29 Sustainable South Bronx
890 Garrison Ave. @ SSBX.org $ 718-617-4668
Environmental justice projects, community market and Green Worker Coop – worker ownership and "green collar" jobs. See @ ArgusCommunity.org's New Leaf, too.

30 Sunflower Way & Melrose Commons II
138th - 139th Streets btw Melrose & Elton Avenues
First affordable Energy Star housing in NY State, with beloved community gardens, see @ moregardens.org

31 Taino Plaza
Very energy efficient, with the Bronx's first PVs!

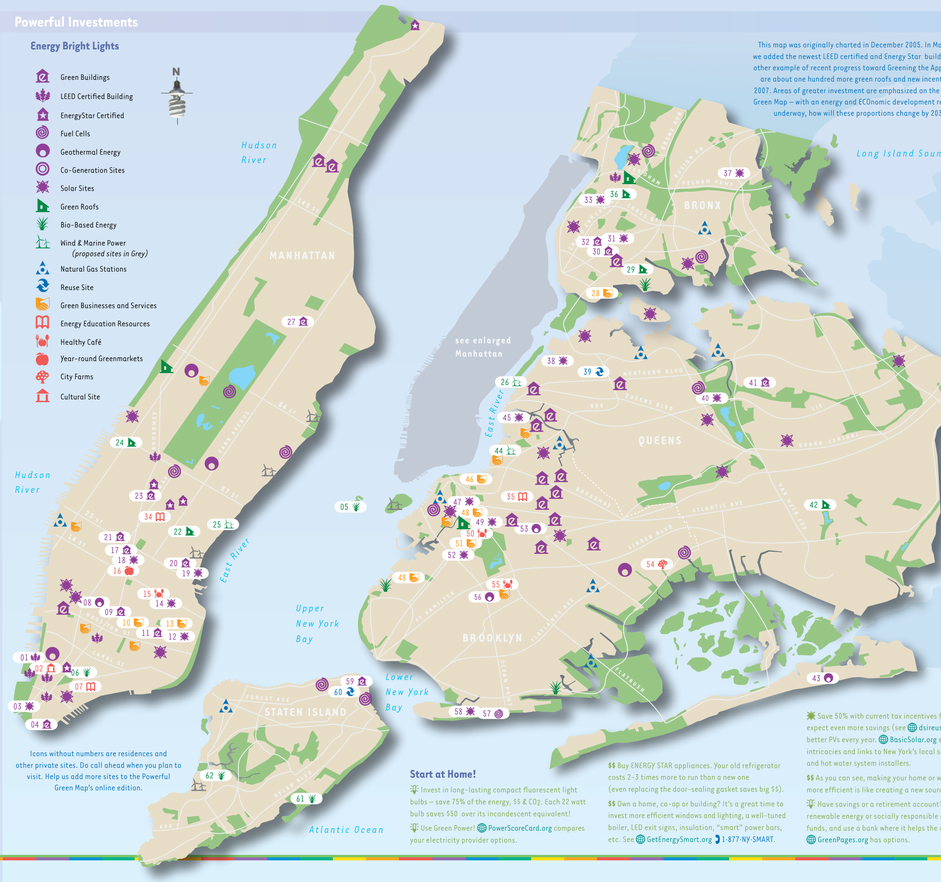
32 Bronx Criminal Court Complex
Advanced heating and cooling system, daylighting.

Consider the well-being of future generations when you shop, eat, commute, work, play, create and vote!

Powerful Investments

Energy Bright Lights

- Green Buildings
- LEED Certified Building
- EnergyStar Certified
- Fuel Cells
- Geothermal Energy
- Co-Generation Sites
- Solar Sites
- Green Roofs
- Bio-Based Energy
- Wind & Marine Power *(proposed sites in Green)*
- Natural Gas Stations
- Reuse Site
- Green Businesses and Services
- Energy Education Resources
- Healthy Café
- Year-round Greenmarkets
- City Farms
- Cultural Site



Icons without numbers are residences and other private sites. Do call ahead when you plan to visit. Help us add more sites to the Powerful Green Map's online edition.

This map was originally charted in December 2005. In May 2007, we added the newest LEED certified and Energy Star buildings. Another example of recent progress toward Greening the Apple: there are about one hundred more fuel cells and new incentives in 2007. Areas of greater investment are emphasized on the Powerful Green Map – with an energy and ECOnomic development revolution underway, how will these proportions change by 2030?

Start at Home!

Invest in long-lasting compact fluorescent light bulbs – save 75% of the energy, $5 & CO2. Each 22 watt bulb saves $50 over its incandescent equivalent!

Use Green Power! @ PowerScoreCard.org compares your electricity provider options.

$$ Buy ENERGY STAR appliances. Your old refrigerator costs 2-3 times more to run than a new one (even replacing the door-sealing gasket saves big $$).

$$ Own a home, co-op or building? It's a great time to invest more efficient windows and lighting, a well-tuned boiler, LED exit signs, insulation, "smart" power bars, etc. See @ GetEnergySmart.org $ 1-877-NY-SMART.

Save 50% with current tax incentives for solar – expect even more savings (see @ dsireusa.org) and better PVs every year. @ BasicSolar.org explains the intricacies and links to New York's local solar electric and hot water system installers.

$$ As you can see, making your home or workplace more efficient is like creating a new source of income!

Have savings or a retirement account? Invest in renewable energy or socially responsible mutual funds, and use a bank where it helps the community. @ GreenPages.org has options.

Take Charge, New Yorkers

Education for a Brighter Future

53 CUNY recently joined the Million Solar Roofs partnership and plans to install 500 PV systems in NYC by 2010 – get trained at CUNY Center for Sustainable Energy at Bronx Community College @ cse-bcc.org $ 718-289-5458. **34 CUNY Grad Center** offers continuing and public sustainability education, 365 Fifth Ave. @ web.gc.cuny.edu/cesp $ 212-817-8215.

35 Pratt Center for Community Development has energy auditing and public education. 379 DeKalb Ave., @ prattcenter.net $ 718-636. See @ NYSeia.org and @ ases.org. All students can get active with @ sustainUS.org and @ EnergyAction.net, too.

@ NeighborhoodEnergyNetwork.org offers great learning events, tours and supports neighborhood organizing around town. Do-it-yourselfers, click @ green-trust.org and @ realgoods.com. @ nyxApollo.org promotes energy-related jobs and development $ 212-827-0200. See @ NESEA.org's Sustainable Yellow Pages $ 413-774-6051 and @ alt-technica.com.

36 St. Simon Stock School
2195 Valentine Ave. $ 718-367-0453
Green roof and environmental education program.

37 Gun Hill Bus Depot
Ely and Bartow Avenues
At 300 kilowatts, it's NYC biggest $#. See @ nypa.gov.

Taking Charge in Queens

38 Noguchi Museum
32-37 Vernon Blvd. @ noguchi.org $ 718-204-7088
Inspiring art, too. Visit Socrates Sculpture Park, next door, and recharge by the river.

39 Build It Green!
3-17 26th Ave. at 45th St. @ bignyc.org $ 718-777-0132
Re-usable building materials warehouse, save $$$! See @ HabitatNYC.org, @ cecenter.org and @ redo.org. @ WasteMatch.org exchanges all kinds of materials.

40 New York Hall of Science
Flushing Meadows-Corona Park – 15kW
@ nyhallsci.org $ 718-699-0005
High performance daylighting in new Hall of Fame.

41 Queens Botanical Garden
43-50 Main St. @ queensbotanical.org $ 718-886-3800
Beautiful, has water recycling, 15kW, recycled materials, under construction. Great sustainable landscapes and education programs. Go Green Queens!

42 South Jamaica Library
11036 Guy Brewer Ave.
@ queenslibrary.org $ 718-739-4088
One of about 50 green roofs citywide. books, too!

43 NYCHA Ocean Bay Community Center
57-18 Beach Channel Dr. $ 718-634-4493
New geothermal system, under construction.

GREEN MAP

Green Map System says Get Involved! Contribute to a healthier, more secure community, country and planet. Help put new sites on this map! At @ GreenMap.org, we welcome your suggestions and support for our local-global mapping movement, now in 46 countries!

Gas Guzzling Departures

Natural Gas Stations for the public are in each borough. Go hybrid, flex-fuel or EV! NYC's fleet has 6,000 alternative fuel and 70 electric vehicles. TriState-Biodiesel.com makes clean fuel for any diesel engine from used cooking oil. Learn more at @ biodieselNOW.com, New Jersey's Hydrogen Center @ policy.rutgers.edu/ceeep, and @ ElectrifyingTimes.com.

Brooklyn Designs for the Future

44 Brooklyn Brewery
79 N 11th St. @ BrooklynBrewery.com
100% wind-powered, community-minded beer! See @ GreenDrinks.org for monthly mixers around town.

45 GreenPoint Manufacturing & Design Center
@ GMDOnline.com $ 718-383-5935
1155 Manhattan Ave. (65 kW) & 810 Humboldt (55kW)
Vital manufacturing site with @ altPOWER.com.

46 Recycle A Bicycle
55 Washington @ recycleabicycle.org $ 718-858-2972
Bikes, new Swift folders, repairs and workshops.

Design is getting greener. Look into @ oZnyc.org's events & green design industry directory which includes @ cyberg.com, @ IceStone.biz and more. Find NYC events at @ green-links.org and @ GreenHomeNYC.org. @ TreeHugger.com has breakthrough projects and @ tinyurl.com/7e54b has industrial resources. Parsons New School of Design and Tishman Center for Environment & Design are on the cutting edge, see @ newschool.edu. See NYS Environmental Business Ass'n @ eba-nys.org $ 518-432-6400 and @ SustainableBusiness.com, too.

Going shopping? Buy local! @ livingeconomies.org explains the benefits, @ eco-logic.com has NYC shops. For natural products, see @ theGreenGuide.com, and find a coupon book at @ thegreenapple.org.

47 Kiss & Cathcart, Architects
44 Court St. @ kisscathcart.com $ 718-237-2786
Specializing in "building-integrated PV", where solar panels ECOnomically replace roof and wall materials. Tour during @ GreenHomeNYC.org's annual October Tour. Check out DC's @ SolarDecathlon.org, too.

48 Community Capital Bank
111 Livingston St. & 140 58th St. $ 718-802-1212
Investing in Brooklyn! @ GreenMoneyJournal.com explores socially responsible and community investing.

49 Habana Outpost
755 Fulton St. @ habanaoutpost.com $ 718-858-9500
Solar powered café and eco-fashion collective.
See @ goetyn.com and @ sustainablestyle.org. Model Summer Rayne Oakes of @ summerrayne.net says,

**"Fashion now comes primarily from outsourced global markets. It is imperative to consider transportation and energy efficiencies